



The Case of the Missing Dino Egg

Grade 4 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Something is wrong in Thunder Valley. The shiny Golden Dino Egg vanished from its nest while everyone slept, and big tracks lead off into the ferns. You are the valley's best young detective, so the herd is counting on you to sniff out the sneaky Egg Snatcher.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the Egg Snatcher is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	DINO KIND	SPECIAL MOVE	BOY OR GIRL	SCALE COLOR	WEAKNESS
Dash	Triceratops	mud tunneling	boy dino	green scales	scared of thunder
Pebbles	Velociraptor	booming roar	girl dino	brown scales	loves shiny rocks
Stompy	T Rex	mud tunneling	boy dino	green scales	loves shiny rocks
Rocky	Pterodactyl	booming roar	boy dino	green scales	scared of thunder
Spike	Triceratops	mud tunneling	girl dino	brown scales	ticklish feet
Swoop	Pterodactyl	cliff climbing	girl dino	green scales	scared of thunder
Petrie	T Rex	booming roar	girl dino	brown scales	loves shiny rocks
Ducky	T Rex	mud tunneling	boy dino	blue scales	ticklish feet
Trixie	Stegosaurus	river splashing	boy dino	green scales	scared of thunder
Crunch	Pterodactyl	river splashing	boy dino	green scales	scared of thunder
Ferny	T Rex	booming roar	boy dino	brown scales	scared of thunder
Dot	Stegosaurus	booming roar	boy dino	green scales	loves shiny rocks
Cera	T Rex	booming roar	boy dino	blue scales	scared of thunder
Littlefoot	T Rex	cliff climbing	boy dino	green scales	scared of thunder
Razor	Pterodactyl	fern hiding	girl dino	brown scales	loves shiny rocks
Bumpy	Pterodactyl	booming roar	girl dino	green scales	ticklish feet
Dizzy	Pterodactyl	river splashing	girl dino	brown scales	ticklish feet
Tilly	Pterodactyl	cliff climbing	girl dino	blue scales	ticklish feet
Bronto	Pterodactyl	mud tunneling	girl dino	green scales	ticklish feet
Mossy	Pterodactyl	mud tunneling	boy dino	brown scales	loves shiny rocks
Nessa	T Rex	booming roar	girl dino	green scales	loves shiny rocks

Rounding

Solve each problem, then write its letter in every clue box that shows the same number.

Top row: 2000, 30, 4700000, 2800, 140000, 31000, 31000, 14000, 140000, 3000, 470, 14000, 3000, 3000, 300000, 2000

Bottom row: 2000, 20000, 3000, 3000, 4700000, 31000, 20000, 3000, 5000, 4700000, 700, 280, 20000, 5000

Round 1,984 to the nearest thousand $\rightarrow$ **T**

Round 28 to the nearest ten $\rightarrow$ **H**

Round 4,669,005 to the nearest hundred thousand → **E**

Round 2,788 to the nearest hundred $\rightarrow$ **V**

Round 139,570 to the nearest ten thousand $\rightarrow$

Round 31,042 to the nearest thousand → **L**

Round 13,857 to the nearest thousand → **A**

Round 3,136 to the nearest thousand → **N**

Round 474 to the nearest ten $\rightarrow$ **C**

Round 307,866 to the nearest hundred thousand → ☒

Round 18,962 to the nearest ten thousand $\rightarrow$ **U**

Round 4,602 to the nearest thousand → **D**

Round 696 to the nearest hundred $\rightarrow$ **R**

Round 280 to the nearest ten $\rightarrow$ **M**

Scratch space:

CLUE 2
Addition

Solve each problem, then write its letter in every clue box that shows the same number.

A										A		A							
4507	8261	7929	4618	9656	7439	3373	3373	3373	4507	8261	4507	9397	3929	6240	7493	7929	9656	3929	

7886	6631	9656	3929	3090	3090

$2613 + 1894 = \boxed{} \rightarrow \boxed{\text{A}}$

$2898 + 5363 = \boxed{} \rightarrow \boxed{\text{W}}$

$4696 + 3233 = \boxed{} \rightarrow \boxed{\text{I}}$

$3100 + 1518 = \boxed{} \rightarrow \boxed{\text{T}}$

$3272 + 6384 = \boxed{} \rightarrow \boxed{\text{N}}$

$3186 + 4253 = \boxed{} \rightarrow \boxed{\text{E}}$

$1781 + 1592 = \boxed{} \rightarrow \boxed{\text{S}}$

$6178 + 3219 = \boxed{} \rightarrow \boxed{\text{B}}$

$2383 + 1546 = \boxed{} \rightarrow \boxed{\text{O}}$

$3697 + 2543 = \boxed{} \rightarrow \boxed{\text{Y}}$

$2251 + 5242 = \boxed{} \rightarrow \boxed{\text{D}}$

$3068 + 4818 = \boxed{} \rightarrow \boxed{\text{R}}$

$4335 + 2296 = \boxed{} \rightarrow \boxed{\text{U}}$

$2039 + 1051 = \boxed{} \rightarrow \boxed{\text{F}}$

Scratch space:

Subtraction

Solve each problem, then write its letter in every clue box that shows the same number.

Diagram illustrating the distribution of 16,000 data points across two rows of 16 bins each. The top row has 15 bins, with the 12th bin highlighted in orange and labeled 'A'. The bottom row has 16 bins, with the 3rd bin highlighted in orange and labeled 'A'. The data points are represented by numbers below each bin.

Bin Index	Top Row Value	Bottom Row Value
1	8076	4432
2	8426	8989
3	1705	8076 (A)
4	1831	7049
5	2048	2526
6		2048
7	1723	2157
8	7553	1723
9	1831	
10	8602	1705
11	2048	2152
12	2526	2152
13	7049	
14	8989	
15	8426	
16	8076 (A)	
17	1087	

9333 - 1257 = → **A**

$$12346 - 3920 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$2149 - 444 = \boxed{} \rightarrow \boxed{0}$$

$$2763 - 932 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$6007 - 3959 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$3355 - 1632 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$11501 - 3948 = \boxed{} \rightarrow \boxed{\text{H}}$$

9190 - 588 = → **N**

$$3066 - 540 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$8340 - 1291 = \boxed{} \rightarrow \boxed{\text{R}}$$

$10528 - 1539 = \boxed{} \rightarrow \boxed{\text{C}}$

$1224 - 137 = \boxed{} \rightarrow \boxed{\text{P}}$

$$9082 - 4650 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$4216 - 2059 = \boxed{} \rightarrow \boxed{1}$$

$$5508 - 3356 = \boxed{} \rightarrow \boxed{\text{F}}$$

Scratch space:

CLUE 4

Multiplication facts (1-12)

Solve each problem, then write its letter in every clue box that shows the same number.

A								A				A						
21	24	120	14	14	90	55	11	21	22	14	22	21	64	9	64	60	27	14
90	14	55	60															

$3 \times 7 = \square \rightarrow \mathbf{A}$	$6 \times 4 = \square \rightarrow \mathbf{G}$	$12 \times 10 = \square \rightarrow \mathbf{R}$
$7 \times 2 = \square \rightarrow \mathbf{E}$	$9 \times 10 = \square \rightarrow \mathbf{N}$	$11 \times 5 = \square \rightarrow \mathbf{S}$
$11 \times 1 = \square \rightarrow \mathbf{C}$	$11 \times 2 = \square \rightarrow \mathbf{L}$	$8 \times 8 = \square \rightarrow \mathbf{Y}$
$9 \times 1 = \square \rightarrow \mathbf{B}$	$6 \times 10 = \square \rightarrow \mathbf{T}$	$3 \times 9 = \square \rightarrow \mathbf{H}$

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

$63 \div 9 = \boxed{}$

$30 \div 10 = \boxed{}$

$48 \div 12 = \boxed{}$

$42 \div 7 = \boxed{}$

$27 \div 3 = \boxed{}$

$66 \div 6 = \boxed{}$

$32 \div 4 = \boxed{}$

$55 \div 11 = \boxed{}$

$8 \div 8 = \boxed{}$

$132 \div 11 = \boxed{}$

$10 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain charges with three sharp horns, then climbs up the rocky cliffs.
2. The villain darts in on quick claws, then hides low in the tall ferns.
3. The villain stomps in with huge jaws, then climbs up the rocky cliffs.
4. The villain swoops down from the sky, then lets out a booming roar.
5. The villain stomps in with huge jaws, then splashes across the wide river.
6. The villain swoops down from the sky, then hides low in the tall ferns.
7. The villain swoops down from the sky, then splashes across the wide river.
8. The villain stomps in with huge jaws, then lets out a booming roar.
9. The villain charges with three sharp horns, then lets out a booming roar.
10. The villain swings its spiky tail, then splashes across the wide river.
11. The villain darts in on quick claws, then tunnels under the soft mud.
12. The villain swings its spiky tail, then tunnels under the soft mud.

Answer Key

The Case of the Missing Dino Egg

Culprit: Trixie

Stegosaurus · river splashing · boy dino · green scales · scared of thunder

Trail: Start 21 → Clue 1 15 → Clue 2 7 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN CANNOT TUNNEL UNDER MUD"

Round 1,984 to the nearest thousand = 2000 (T) · Round 28 to the nearest ten = 30 (H) · Round 4,669,005 to the nearest hundred thousand = 4700000 (E) · Round 2,788 to the nearest hundred = 2800 (V) · Round 139,570 to the nearest ten thousand = 140000 (I) · Round 31,042 to the nearest thousand = 31000 (L) · Round 13,857 to the nearest thousand = 14000 (A) · Round 3,136 to the nearest thousand = 3000 (N) · Round 474 to the nearest ten = 470 (C) · Round 307,866 to the nearest hundred thousand = 300000 (O) · Round 18,962 to the nearest ten thousand = 20000 (U) · Round 4,602 to the nearest thousand = 5000 (D) · Round 696 to the nearest hundred = 700 (R) · Round 280 to the nearest ten = 280 (M)

Clue 2 (Addition): "A WITNESS SAW A BOY DINO RUN OFF"

$2613 + 1894 = 4507$ (A) · $2898 + 5363 = 8261$ (W) · $4696 + 3233 = 7929$ (I) · $3100 + 1518 = 4618$ (T) · $3272 + 6384 = 9656$ (N) · $3186 + 4253 = 7439$ (E) · $1781 + 1592 = 3373$ (S) · $6178 + 3219 = 9397$ (B) · $2383 + 1546 = 3929$ (O) · $3697 + 2543 = 6240$ (Y) · $2251 + 5242 = 7493$ (D) · $3068 + 4818 = 7886$ (R) · $4335 + 2296 = 6631$ (U) · $2039 + 1051 = 3090$ (F)

Clue 3 (Subtraction): "A LOUD THUNDER CLAP SCARED IT OFF"

$9333 - 1257 = 8076$ (A) · $12346 - 3920 = 8426$ (L) · $2149 - 444 = 1705$ (O) · $2763 - 932 = 1831$ (U) · $6007 - 3959 = 2048$ (D) · $3355 - 1632 = 1723$ (T) · $11501 - 3948 = 7553$ (H) · $9190 - 588 = 8602$ (N) · $3066 - 540 = 2526$ (E) · $8340 - 1291 = 7049$ (R) · $10528 - 1539 = 8989$ (C) · $1224 - 137 = 1087$ (P) · $9082 - 4650 = 4432$ (S) · $4216 - 2059 = 2157$ (I) · $5508 - 3356 = 2152$ (F)

Clue 4 (Multiplication facts (1-12)): "A GREEN SCALE LAY BY THE NEST"

$3 \times 7 = 21$ (A) · $6 \times 4 = 24$ (G) · $12 \times 10 = 120$ (R) · $7 \times 2 = 14$ (E) · $9 \times 10 = 90$ (N) · $11 \times 5 = 55$ (S) · $11 \times 1 = 11$ (C) · $11 \times 2 = 22$ (L) · $8 \times 8 = 64$ (Y) · $9 \times 1 = 9$ (B) · $6 \times 10 = 60$ (T) · $3 \times 9 = 27$ (H)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Trixie

$63 \div 9 = 7$ · $30 \div 10 = 3$ · $48 \div 12 = 4$ · $42 \div 7 = 6$ · $27 \div 3 = 9$ · $66 \div 6 = 11$ · $32 \div 4 = 8$ · $55 \div 11 = 5$ · $8 \div 8 = 1$ · $132 \div 11 = 12$ · $10 \div 5 = 2$